



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/993,898	11/27/2001	Mutsumi Nakajima	925-220	7680

7590 07/10/2003
NIXON & VANDERHYE P.C.
8th Floor
1100 North Glebe Road
Arlington, VA 22201

EXAMINER

DUONG, TAI V

ART UNIT PAPER NUMBER

2871

DATE MAILED: 07/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/993,898

Applicant(s)

NAKAJIMA, MUTSUMI

Examiner

TAI DUONG

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3. 6) ☐ Other:

Art Unit: 2871

Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1, 6 and 10, it is unclear what the bounds are for the recited phrase "formed almost all over a display screen". In other words, how the auxiliary capacitor electrode or the light-shielding film is determined as "almost all over a display screen" or "not almost all over a display screen". It is noted that the meaning of the phrase "formed almost all over a display screen" recited in claim 1 is not consistent with that of claim 6. For example, in Fig. 2, the transparent auxiliary capacitor electrode 8 is formed almost all over the pixel electrode 10 while the light-shielding film 38 is formed only at a part of the pixel electrode 40 in Fig. 6. The same issue is applied to the recited phrase "formed almost all over a display screen" of claim 10. In claims 5, 9, 15 and 16, the recited feature "the removed portion" lack antecedent basis. The remaining claims are also rejected since they depend on the indefinite claims. Is the limitation "having at least partially been removed" a product-by-process limitation? For device claims, this limitation is interpreted by the examiner as "the auxiliary capacitor electrode or the light-shielding film is not formed at the region corresponding to a gap between the adjacent pixel electrodes".

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application

Art Unit: 2871

by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1, 2, 4 and 6-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Nakagawa et al.

Note in Figs. 4 and 5 the auxiliary capacitor electrode 11 or the light-shielding film not being formed at a region corresponding to a gap in the vertical direction between the adjacent pixel electrodes 9, the auxiliary capacitor electrode or the light-shielding film being opposed to the pixel electrode 9 with an insulation film (4 or 10) therebetween, and the auxiliary capacitor electrode 11 or the light-shielding film being at least partially laid over the scanning line 3 (col. 2, lines 35-42).

Claims 3, 5 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 10 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

Art Unit: 2871

Claims 11-16 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claims 3, 5 and 9-16 would be allowable over the prior art because none of the prior art discloses or suggests the auxiliary capacitor electrode, having structure recited in claim 1, being made of a light permeable material and disposed in at least one portion of an opening of each of the pixels. Also, none of the prior art discloses or suggests a width of the removed portion of the auxiliary capacitor electrode or the light-shielding film being larger than a width of the gap between the adjacent pixel electrodes. Lastly, none of the prior art discloses or suggests the auxiliary capacitor electrode and the light-shielding film being opposed to the pixel electrode with an insulation film therebetween, a region of the auxiliary capacitor electrode and of the light-shielding film corresponding to a gap between the adjacent pixel electrodes having at least partially been removed.

Any inquiry concerning this communication should be directed to Tai Duong at telephone number 703 308-4873.


TVD

06/30/03


TOANTON
PRIMARY EXAMINER